A REJOINDER

I REGRET to have misconstrued Professor Young's language respecting the uselessness of the depreciation reserve. I think I am right, however, in crediting him with holding that to accumulate such a reserve needlessly keeps in the business assets which might be distributed to the stockholders, and that the reserve is used for replacements and is useless if it will at no time be entirely exhausted by replacements. Such a view, I am clear, involves an erroneous conception of this reserve. Assuming that depreciation of a physical plant is an inescapable economic fact, despite the utmost assiduity in keeping the plant in proper working condition and regardless of circumstances or methods of taking the fact into account, a reserve for accrued depreciation which approximates the actual depreciation is, I believe, corresponded to by no real assets and does not represent " an additional, permanent, and compulsory investment in the business to take the place of the amount of the investment written off for depreciation " (p. 648). It is simply an accounting device to measure the amount by which the value figure for plant, on the balance sheet, exceeds the actual value, as nearly as the excess can be estimated. Tho a " liability account " in the sense of being a credit item, it is a mere " offset," a " negative reserve," and is to be sharply distinguished from those reserves which are segregated parts of the surplus and *are* corresponded to by equivalent amounts of specified or unspecified assets, in reality as well as on the balance sheet; just as a deficit, often listed among the assets, is to be sharply distinguished from items which represent actual assets. Such a reserve is merely a record of fact, altho, since the fact — the amount of depreciation — cannot be ascertained

with precision, the record is, like many records, only an approximation to the truth. And Professor Young seems to me to argue beside the point when he endeavors to show " the fallacy in the view that the ' reserve for accrued depreciation ' is a necessary record of fact," by pointing out that replacement requirements do not necessitate an advance accumulation of a " fund " that will amount to much more than the annual cost of such replacements (pp. 650–651). As I pointed out in my criticism, the keeping of such a reserve does not hold in the business assets which might otherwise be distributed to stockholders, tho by preventing liquidated capital from masquerading as profits it may restrict *ordinary* dividends. The reserve is typically and properly reduced when property is retired (by the accrued depreciation on the item retired), the reduction going to offset the writing down of the plant account by the cost of the property retired. Far from releasing assets for distribution to stockholders, the making of replacements involves locking up, in more or less fixed capital, liquid assets already in the business or brought into the business for the purpose. The ability to make replacements depends on the amount of such liquid assets available or obtainable; it is less in times of financial depression than in other times, it is greater for companies which make a policy of keeping against such contingencies an amount of liquid assets largely in excess of ordinary needs. The proper keeping of this reserve account does indeed eliminate from the profit and loss account all variations due to the circumstance that replacements are not even normally made with entire regularity. But I see no reason to modify my conclusion that the ability to make replacements or renewals is not affected by the keeping of this account. Granted that the reserve for accrued depreciation will never be " used up " as replacements are made, what of it ?

This matter is, I believe, intimately related to the question of impairment of investment and the reality of stated profits. If a large and varied physical plant, like each of its several elements, actually depreciates and the reserve for accrued depreciation represents no real assets, figures showing the total outlays for the present plant cannot correctly represent the present amount of the investment in it; and, if a reserve for accrued depreciation is lacking or inadequate, any surplus shown is in part spurious — corresponded to by no real assets in the business — while if no surplus is shown, something in addition to genuine profits has been distributed to stockholders, or else losses have directly impaired the investment. I had understood from his original article that Professor Young would deny the depreciation and maintain that, provided repairs and replacements were made as needed to keep the plant in good working order, the investment "in every real sense" remained intact (p. 651). He now admits, however, comparing an old plant with a new one of similar make-up, (1) that the older embodies a smaller store of productive power,[1] (2) that outlays for needed repairs and replacements will be larger for the old than for the new (till the new one has reached the stage of normal average depreciation), (3) that accordingly, in an important sense, if not in the sense he prefers, the productive efficiency of the new one is greater,[2] and (4) that whether sold at forced sale or changing hands as a going concern in good condition selling prices would be different. Perhaps I am safe in assuming, therefore, that we agree that, from most standpoints, the present

[1] At two points in his reply (p. 382), Professor Young imputes to me the use of "productive efficiency" where my term was actually "productive power."

[2] Cf. also the statement in his original article (p. 652): "In the absence of such a reserve net profits for the time being would of course have been higher than if a reserve had been accumulated."

amount of the investment is not indicated by the undepreciated cost. I had further understood him to say that since, " in the case of a permanent industrial investment for profit," there is no *clear* line between profits and repayment of principal, we must rely upon " the expectations, plans, and estimates of the proprietors in order to estimate what may properly be called net income " (p. 652). For my part I cannot see that the question of fact, — what were profits and what were not ? — is affected at all by what the proprietors may have thought. Calling a sum " profits " does not make it so, whether the " caller " be promoter, honest investor, or accountant. A line exists *in fact* between profits and liquidated capital, altho there is no automatic earmarking of the elements of gross income; and a major function of the accountant, with all his " arbitrary categories," is to make the line displayed on financial statements reflect as accurately as possible the invisible line which exists in fact. But if Professor Young sees these facts as I do, much of my criticism was beside the point, except for readers who, like myself, misunderstood his language.

Suppose, then, that he is to be interpreted throughout as implying the phrase "for purposes of rate regulation," and, conducting his argument for this purpose alone, he would argue merely that depreciation should be *disregarded* if proprietors have not set up a reserve for it, calculated profits should be *treated* as true profits, stated surplus as true surplus, and the investment should be *rated* at cost, not at cost-less-depreciation. This would be to separate sharply the question of justice from the question of economic fact, — questions which I have thought Professor Young tended to confuse.

Neglecting for the moment the considerations of justice, the expediency of such action is gravely to be

questioned. So far at least as concerns the depreciable physical plant (and this element alone is under discussion), there would seem to be distinct disadvantages in arriving at four different figures for its value in a going concern, according to whether the valuation has reference to transfer between private parties, purchase by government, regulation of security issues, or regulation of rates. The " fair value " of the plant of a going concern should mean in each case, I believe, the nearest possible approximation, fixed by honest, intelligent, careful appraisal, to what its rating would be in a voluntary, unforced sale of the entire concern in a period of normal business.[1] Any other policy certainly makes against consistent action, and in the long run, I believe, for injustice.[2] If justice requires, it is not difficult to make due allowance in other ways for losses, abnormally low real profits, or what not.[3]

The problem of justice is an intricate one. I am ready to admit that cases may be found where, tho the plant investment is actually less than its net book value, well-managed companies have secured no more than a normal return because of reliance upon an assumption which, however erroneous, was fostered by court decisions and prevailing business standards; and that real injustice may be done by disregarding these facts entirely when rates are regulated. Yet I cannot think it safe now to presume that uncontrolled public service

[1] The " break-up value " or value with " reference to a possible insolvency " would of course be different; but when we are dealing with a going concern such a value is potential, hypothetical, not actual, present, and need not be considered.

[2] Here is implied, obviously, a criticism of certain court and commission decisions. Since, however, cost-of-reproduction-less-depreciation is a not unusual " basis " for valuing a physical plant, and since this would at least approximate the " fair value " as I regard it, my view is by no means revolutionary.

[3] For example, the amount of the loss for which justice is held to require reimbursement may be made a deferred charge to profit and loss, and for the time being rates may be fixed which yield beyond the normal return on the present investment enough gradually to reduce this debit. Less satisfactorily, the sum may be made an independent item in the total valuation.

companies have treated the public better than if a requirement to keep depreciation accounts had been in force. If business men would recognize that the " sale value " of an old plant is less than for a new one similarly constituted, is it certain that they would think that the two represent the same amount of investment ? Or that they would not calculate upon large returns in early years which could be used in part for extensions without increasing the capital stock ? Or that they would expect a normal rate of profit measured on the gross outlay for plant ? One has been accustomed to believe, moreover, that before public regulation came into vogue the principle of monopoly value held large sway in public utility properties; and if monopolistic proprietors really fixed lower rates because they had not learned to allow for depreciation, their action is not in accord with what the usual expositions of economic theory lead us to expect. Certainly common report of stockwatering episodes and of fortunes made in this field does not predispose one to look upon the investors as having been but barely remunerated for their investment.

On the other hand, it is equally difficult to argue convincingly that the lack of the depreciation requirement has made no difference to investors. Abstract reasoning, it seems to me, cannot establish either this presumption or the other. The facts are not clear. Evidence should be presented to show that, in the main, properly managed public service companies have secured (but not necessarily divided) less than a normal rate of profit on their investment, properly valued. Professor Young offers only one bit of evidence. And I think he adopts too hastily the interpretation placed by the editor (the late Carroll D. Wright ?) upon the data published in the report of the Commissioner of Labor

(1899). No figures for capital stock, surplus, or dividends were shown in that report. The depreciation allowance for the year which was included in cost was a highly arbitrary figure, as a rule merely an estimate by the official who made out the returns; the companies themselves did not use the figure, and a cursory study of the data strongly indicates that the allowance, which figured very heavily in the sum of costs, was a liberal one. But even supposing it to be substantially accurate, its inclusion in the year's costs showed merely that the net profits for that year were less than a normal return *on the total outlay* (*undepreciated cost*) for construction and improvements. If calculated on cost less accrued depreciation the showing could have been far different. It is significant, it seems to me, that so many companies admitted the fact of depreciation in that year, despite proper repairs and renewals, even tho they did not make a practice of dealing with depreciation in their accounts. Furthermore, another very plausible interpretation may be put upon the fact that, in so many companies, the current revenue did not exceed costs including current depreciation by an amount sufficient to yield, on the undepreciated investment, a rate of return even equal to that paid on its latest bond issue by the cities in which the plants were located. That interpretation is, that the companies did not consider the *gross outlay* on plant to represent the principal of the investment on which they figured their rate of profit. Has it not been true that most companies which have not "booked" depreciation have paid for extensions and inprovements out of earnings, and either have not included the cost of these in their figures for plant value, or while so including them have built up a correspondingly large (nominal) surplus? In either case, dividends would be measured on the

original capital, or on capital stock more or less arbitrarily issued, and no obvious figure would show the rate of yield upon what they considered the investment entitled to return. I suspect that many public service companies would be greatly surprised and delighted if rates were revised to yield a " normal return " on the undepreciated outlays on their plant and improvements.

In short, on the question of justice which I now understand him to regard as central, I regard Professor Young's reasoning as still inconclusive, and his recommendation based on that reasoning as still unacceptable.

Joseph S. Davis.

CONCLUDING COMMENTS

I am sorry to prolong this controversy, but Mr. Davis's rejoinder brings the difference in our views so nearly to a point that I must attempt to complete that task. He still maintains (1) that the existence of a reserve for accrued depreciation has no bearing upon ability of a company to make replacements, and (2) that the market value of a plant is what should be sought in valuation for purposes of rate control.

1. To Mr. Davis the depreciation reserve is merely a record of fact and has no other function, while I am pragmatist enough to insist that the definition of fact must itself hinge upon some specific function or purpose of the reserve. But there is a particular fact of which Mr. Davis would make the depreciation reserve a record, and that is the diminution of the market value of capital assets which results from the shrinkage of their aggregate expectation of life. Mr. Davis would not, I suppose, question the fact that charges for the depreciation of fixed capital were first introduced into